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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,097	08/15/2001	Indermohan S. Monga	14984BAUS01U	1004

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EXAMINER	
ALAM, UZMA	

ART UNIT	PAPER NUMBER
2157	

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/930,097	MONGA ET AL.	
	Examiner	Art Unit	
	Uzma Alam	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 August 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 August 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to the application filed on August 15, 2001. Claims 1-36 are pending. Claims 1-36 represent a method for provisioning bandwidth.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 3, 12, 13, 24 and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Wang et al. Wang discloses the invention as claimed including a method for provisioning bandwidth (see abstract).

As per claims 12 and 24 Wang discloses the device comprising:

a user application requiring communication services from an optical communication network (column 5, lines 20-64); and

an optical service agent for providing bandwidth management services for the user application (column 6, lines 4-12; column 7, lines 7-15; column 8, lines 4-10; column 6, ines 4-11).

As per claims 1 and 13 Wang discloses an optical service agent as in claim 12 for providing bandwidth management services for a user in an optical communication system, the optical service agent comprising:

a user-to-network interface (UNI) for interfacing with an optical communication network (interfacing with the fiber network with a user to network interface; column 6, lines 4-12; column 7, lines 1-15; column 8, lines 6-20);

a peer-to-peer interface for interfacing with peer users (column 12, lines 15-40); and

optical service logic for interfacing with the optical communication network via the UNI and with the peer users via the peer-to-peer interface for providing said bandwidth management services for the user (managing bandwidth using the same interface for the network and peer to peer communication column 7, lines 7-15; column 9, lines 15-20, lines 35-67; column 10, lines 1-7).

As per claim 3, 15, 26, and 31 Wang discloses the optical service agent of claim 1, wherein the optical service logic comprises:

bandwidth monitoring logic for monitoring bandwidth utilization on a connection (column 9, line 35-67).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2, 14 and 25are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. US Patent No. 6,636,505 in view of Lo et al. US Patent Publication No. 2002/0156914. Lo discloses the invention as claimed including a controller for managing bandwidth (see abstract).

Wang discloses the optical service agent of claims 1, 13, and 24 comprising a UNI (column 6, lines 4-12; column 7, lines 7-15; column 8, lines 4-20. Wang does not disclose wherein the optical communication network comprises an automatically switched optical/transport network (ASON), and wherein the UNI comprises an ASON UNI. Lo discloses wherein the optical communication network comprises an automatically switched optical/transport network (ASON), and wherein the UNI comprises an ASON UNI. See paragraphs 0031-0039. It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine the network and UNI of Wang with the ASON network and UNI of Lo. A person of ordinary skill in the art would have been motivated to do this to manage a fiber optic network.

Claims 4-11, 16-23, 28-30, and 32-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. US Patent No. 6,636,505 in view of Vaid et al. US Patent No. 6,341, 309. Vaid discloses the invention as claimed including a network for improving quality of service (see abstract).

As per claims 4, 16, and 27, Wang discloses the optical service agent of claims 1, 13, and 24. Wang does not disclose wherein the optical service logic comprises: bandwidth controlling logic for controlling bandwidth utilization on a connection. Vaid discloses bandwidth controlling logic for controlling bandwidth utilization on a connection. See column 6, lines 25-40. It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine monitoring bandwidth of Wang with controlling bandwidth of Vaid. A person of ordinary skill in the art would have been motivated to do this to control connections between the user and the network (column 10, liens 32-44).

As per claims 5, 17 and 28 Wang discloses the optical service agent of claims l, 13 and 24. Wang does not disclose wherein the optical service logic comprises: bandwidth obtaining logic for obtaining additional bandwidth for a connection. Vaid discloses bandwidth obtaining logic for obtaining additional bandwidth for a connection. See column 6, lines 4-11. It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine monitoring bandwidth of Wang with obtaining bandwidth of Vaid. A person of ordinary skill in the art would have been motivated to do this to control connections between the user and the network (column 10, liens 32-44).

As per claims 6, 18 and 29, Wang discloses the optical service agent of claims 1, 13, and 24. Wang does not disclose wherein the optical service logic comprises: bandwidth relinquishing logic for relinquishing excess bandwidth for a connection. Vaid discloses bandwidth relinquishing logic for relinquishing excess bandwidth for a connection. See column 6, lines 4-11; column 7, lines 21-32. It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine monitoring bandwidth of Wang with relinquishing excess bandwidth of Vaid. A person of ordinary skill in the art would have been motivated to do this to control connections between the user and the network (column 10, liens 32-44).

As per claims 7, 19 and 30 Wang discloses the optical service agent of claims 1, 13 and 24. Wang does not disclose wherein the optical service logic comprises: bandwidth allocation logic for allocating bandwidth among multiple connections. Vaid discloses bandwidth allocation logic for allocating bandwidth among multiple connections. See column 6, lines 4-11; column 7, lines 21-32. It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine monitoring bandwidth of Wang with allocating bandwidth of Vaid. A person of ordinary skill in the art would have been motivated to do this to control connections between the user and the network (column 10, liens 32-44).

As per claims 8 and 20, Wang discloses the optical service agent of claims 4 and 16. Wang does not disclose wherein the bandwidth controlling logic is operably coupled to prevent bandwidth utilization on the connection from exceeding a predetermined maximum bandwidth utilization. Vaid discloses bandwidth controlling logic is operably coupled to prevent bandwidth utilization on the connection from exceeding a predetermined maximum bandwidth utilization.

See column 6, lines 25-40. It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine monitoring bandwidth of Wang with preventing exceeding of a maximum bandwidth of Vaid. A person of ordinary skill in the art would have been motivated to do this to control connections between the user and the network (column 10, liens 32-44).

As per claims 9 and 21, Wang discloses the optical service agent of claims 5 and 17. Wang does not disclose wherein the bandwidth obtaining logic is operably coupled to obtain the additional bandwidth for the connection upon determining that bandwidth utilization on connection exceeds a predetermined level. Vaid discloses bandwidth obtaining logic is operably coupled to obtain the additional bandwidth for the connection upon determining that bandwidth utilization on connection exceeds a predetermined level. See column 6, lines 4-11. It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine monitoring bandwidth of Wang with obtaining bandwidth of Vaid. A person of ordinary skill in the art would have been motivated to do this to control connections between the user and the network (column 10, liens 32-44).

As per claims 10 and 22, Wang discloses the optical service agent of claims 6 and 18. Wang does not disclose wherein the bandwidth relinquishing logic is operably coupled to relinquish excess bandwidth for the connection upon determining that bandwidth utilization on the connection is below a predetermined level. Vaid discloses bandwidth relinquishing logic is operably coupled to relinquish excess bandwidth for the connection upon determining that bandwidth utilization on the connection is below a predetermined level. See column 6, lines 4-

11; column 7, lines 21-32. It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine monitoring bandwidth of Wang with relinquishing bandwidth of Vaid. A person of ordinary skill in the art would have been motivated to do this to control connections between the user and the network (column 10, liens 32-44).

As per claims 11 and 23, Wang discloses he optical service agent of claims 7 and 19. Wang does not disclose wherein the bandwidth allocation logic is operably coupled to identify an over-utilized connection and an under-utilized connection and to transfer traffic from the over-utilized connection to the under-utilized connection. Vaid discloses the bandwidth allocation logic is operably coupled to identify an over-utilized connection and an under-utilized connection and to transfer traffic from the over-utilized connection to the under-utilized connection. See column 6, lines 12-24. It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine monitoring bandwidth of Wang with allocating bandwidth of Vaid. A person of ordinary skill in the art would have been motivated to do this to control connections between the user and the network (column 10, liens 32-44).

As per claim 32, Wang discloses the method of claim 31 wherein controlling bandwidth utilization on a connecction comprises: monitoring bandwidth utilization on the connection. See column 9, lines 35-67; column 10, lines 1-7.

Wang does not disclose determining that the bandwidth utilization has exceeded a predetermined level; and taking an action to prevent the bandwidth utilization from exceeding a predetermined maximum bandwidth utilization. Vaid discloses determining that the bandwidth utilization has exceeded a predetermined level; and taking an action to prevent the bandwidth

utilization from exceeding a predetermined maximum bandwidth utilization. See column 6, lines 4-40; column 7, lines 21-32. It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine monitoring bandwidth of Wang with prevent excess use of bandwidth of Vaid. A person of ordinary skill in the art would have been motivated to do this to control connections between the user and the network (column 10, liens 32-44).

As per claim 33, Wang and Vaid disclose the method of claim 32. Wang does not disclose wherein taking an action to prevent the bandwidth utilization from exceeding a predetermined maximum bandwidth utilization comprises dropping packets. Vaid discloses taking an action to prevent the bandwidth utilization from exceeding a predetermined maximum bandwidth utilization comprises dropping packets. See column 6, lines 4-11. It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine monitoring bandwidth of Wang with prevent excess bandwidth utilization of Vaid. A person of ordinary skill in the art would have been motivated to do this to control connections between the user and the network (column 10, liens 32-44).

As per claim 34, Wang discloses the method of claim 31 wherein obtaining additional bandwidth for a connection comprises: monitoring bandwidth utilization on the connection (column 9, lines 35-67; column 10, lines 1-7).

Wang does not disclose determining that the bandwidth utilization has exceeded a predetermined level; and obtaining additional bandwidth for the connection.

Vaid discloses determining that the bandwidth utilization has exceeded a predetermined level (column 6, lines 4-11); and

obtaining additional bandwidth for the connection (column 7, lines 21-32). It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine monitoring bandwidth of Wang with obtaining bandwidth of Vaid. A person of ordinary skill in the art would have been motivated to do this to control connections between the user and the network (column 10, liens 32-44).

As per claim 35, Wang discloses the method of claim 31, wherein relinquishing unused bandwidth for a connection comprises: monitoring bandwidth utilization on the connection (column 9, lines 35-67; column 10, lines 1-7).

Wang does not disclose determining that the bandwidth utilization is below a predetermined level; and relinquishing excess bandwidth for the connection.

Vaid discloses determining that the bandwidth utilization is below a predetermined level; and relinquishing excess bandwidth for the connection. See column 6, lines 4-11; column 7, lines 21-32. It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine monitoring bandwidth of Wang with relinquishing bandwidth of Vaid. A person of ordinary skill in the art would have been motivated to do this to control connections between the user and the network (column 10, liens 32-44).

As per claim 36, Wang discloses he method of claim 31 wherein allocating bandwidth among multiple connections comprises: monitoring bandwidth utilization on a number of connections (column 9, liens 35-67; column 10, lines 1-7). Wang does not disclose identifying an over-utilized connection and an under-utilized connection; and transferring traffic from the over-utilized connection to the under-utilized connection.

Vaid discloses identifying an over-utilized connection and an under-utilized connection; and transferring traffic from the over-utilized connection to the under-utilized connection.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine monitoring bandwidth of Wang with allocating bandwidth of Vaid. A person of ordinary skill in the art would have been motivated to do this to control connections between the user and the network (column 10, liens 32-44).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uzma Alam whose telephone number is (571) 272-3995. The examiner can normally be reached on Monday-Tuesday 11:30am-8pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ua

SALEH NAJJAR
PRIMARY EXAMINER